



L940-__ _V Infrared LED Lamp

This series of L940-__ _V is a GaAs LED mounted on a lead frame and encapsulated in various types of epoxy lens which offer different design settings. On forward bias, it emits a high power radiation of typical 40mW with a peak wavelength at 940nm.

1) Specifications

(1) Chip material	GaAs	(4) Package	Clear epoxy resin
(2) Chip Size	0.4mm*0.4mm	(5) Lead frame	Soldered
(3) Peak wavelength	940nm		

2) Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	140	mW	Ta=25°C
Forward Current	IF	100	mA	Ta=25°C
Pulse Forward Current	IFP	1000	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +85	°C	Ta=25°C
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature	TSOL	260	°C	

3) Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA DC		1.30	1.45	V
		IF=100mA, tp=20ms		1.40	1.65	
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power	PO	IF=50mA DC	16.0	20.0		mW
		IF=100mA, tp=20ms		40.0		
Peak Wavelength	λP	IF=50mA DC		940		nm
Half Width	Δλ	IF=50mA DC		50		nm
Rise Time	tr	IF=50mA DC		1000		ns
Fall Time	tf	IF=50mA DC		500		ns

4) Characteristics of Radiant Intensity [Ta=25°C]

Type	Viewing Half Angle	Radiant Intensity IF=100mA, tp=20ms unit: mW/sr			Outer Dimension	
		Minimum	Typical	Maximum	Dimension	Figure
L940-01V	±10°		130		Φ5	1
L940-02V	±5°		160		Φ5	2
L940-03V	±15°		110		Φ5	3
L940-04V	±20°		50		Φ5	4
L940-05V	±40°		14		Φ5	5
L940-06V	±7°		180		Φ5	6
L940-09V	±25°(Long)		80		Φ5	7
	±15°(Short)			Oval		
L940-33V	±15°		50		Φ3	9
L940-36V	±30°		26		Φ3	10

‡ Radiant Intensity is measured by Tektronix J-16.

‡ Total Radiated Power is measured by Photodyne #500.



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L940-05V	±40°		14		Φ5	5
L940-06V	±7°		180		Φ5	6
L940-09V	±25°(Long)		80		Φ5	7
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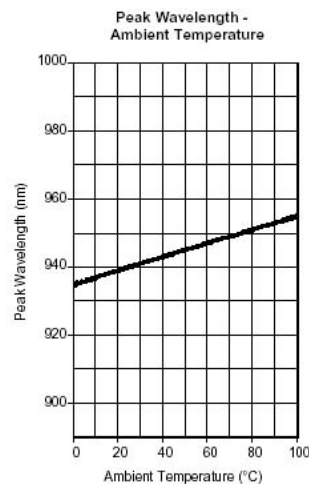
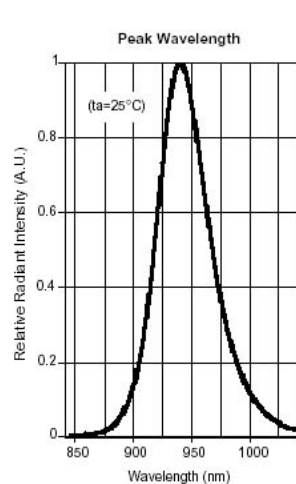
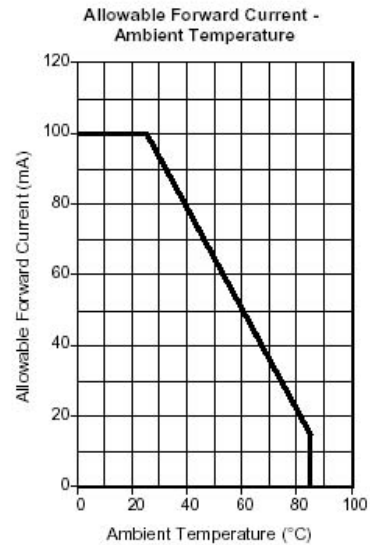
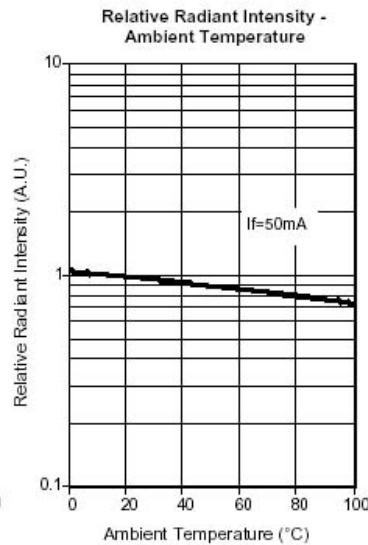
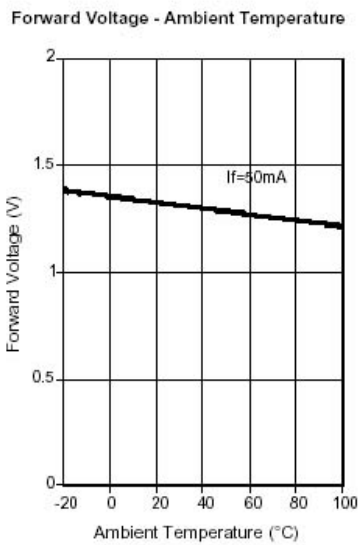
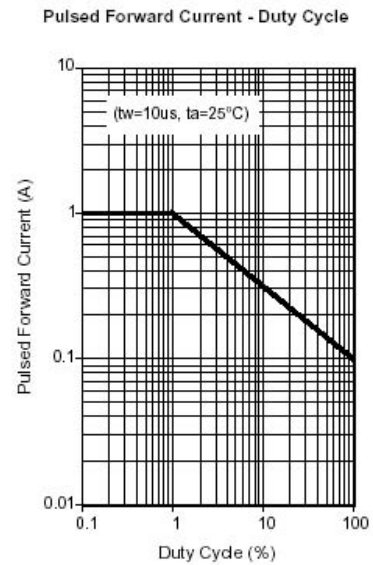
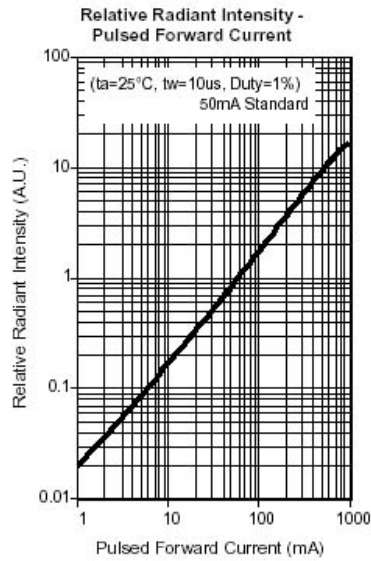
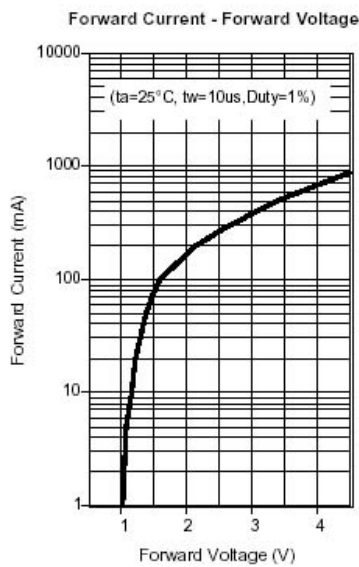


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Outer Dimension of LED Lamp

Figure-1 f5Mold(Type01)

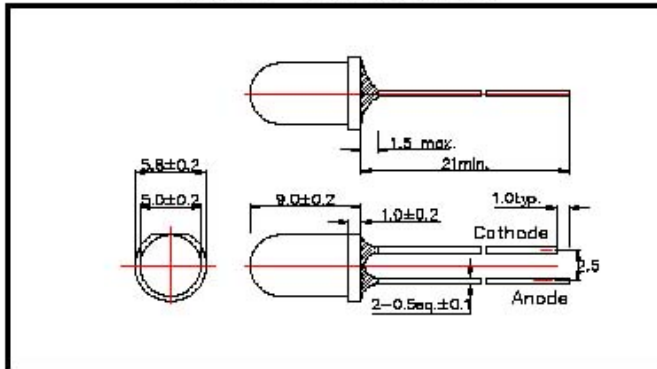


Figure-2 f5Mold(Type02)

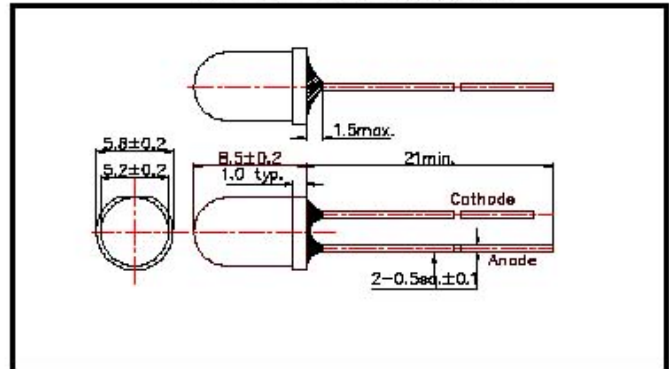


Figure-3 f5Mold(Type03)

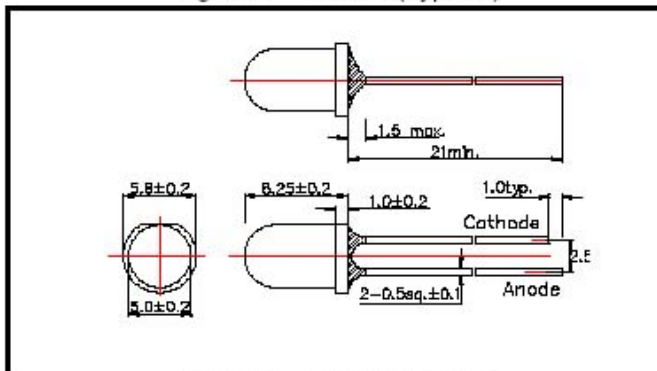


Figure-4 f5Mold(Type04)

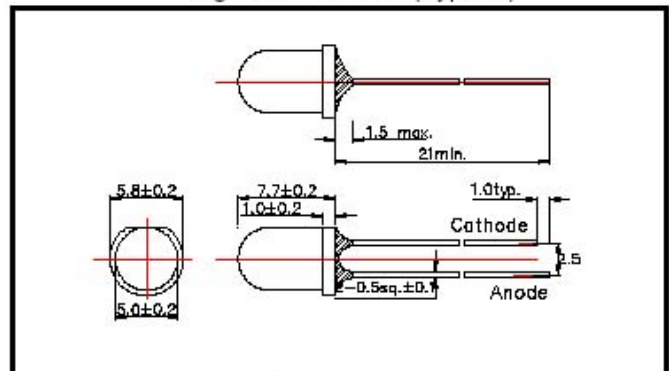


Figure-5 f5Mold(Type05)

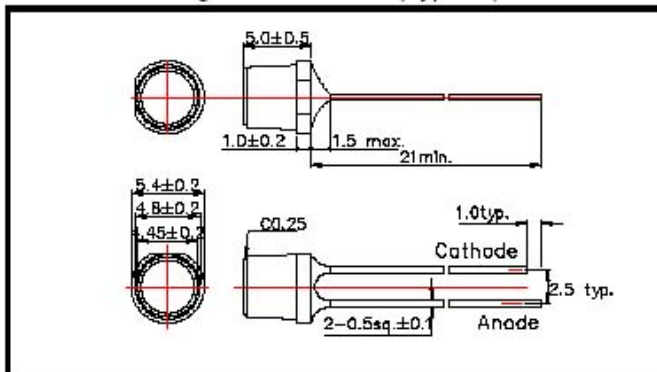


Figure-6 f5Mold(Type06)

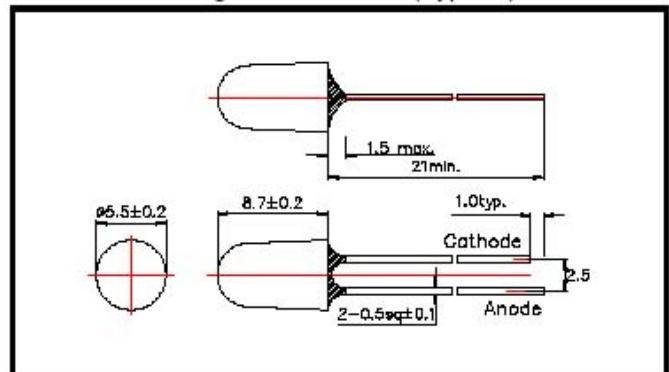




Figure-7 f5Mold(Type09)

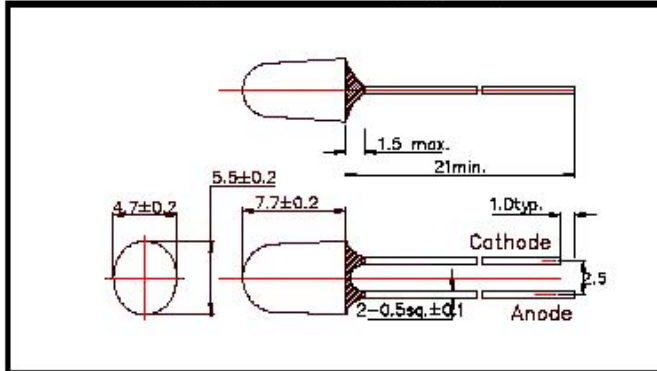


Figure-8 f5Mold(Type10)

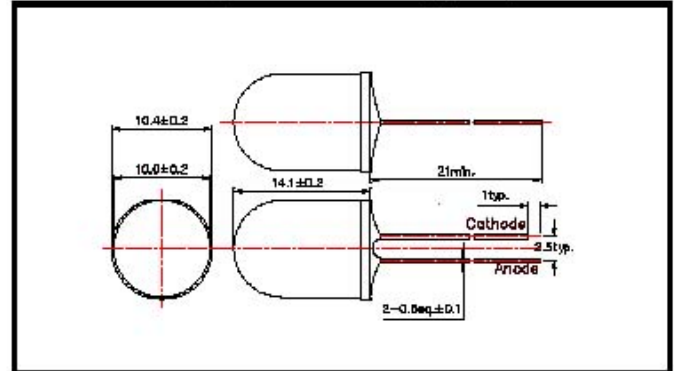


Figure-9 f3Mold(Type33)

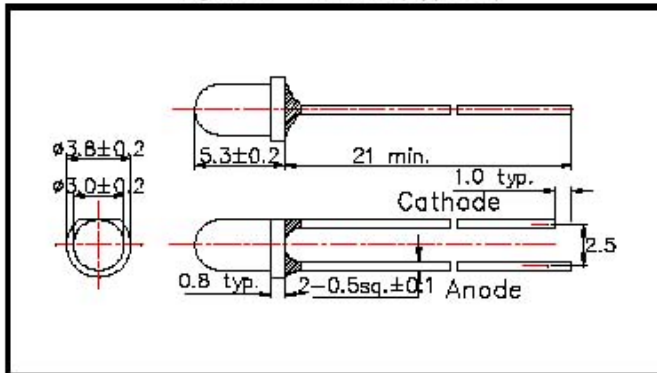


Figure-10 f3Mold(Type36)

